Serial No. 10/600,096
Docket No. 146712010300

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-125344
(43)Date of publication of application : 26.04.2002

(51)Int.Cl. H02K 5/16
F16C 17/02
F16C 17/08
F16C 33/10
G11B 17/038
G11B 19/20
H02K 5/124
H02K 7/08

(21)Application number : 2000-316848
(22)Date of filing : 12.10.2000

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(54) MAGNETIC DISC DEVICE AND DISC-DRIVING SPINDLE MOTOR

(57)Abstract:
PROBLEM TO BE SOLVED: To meet the needs for a fluid bearing structure having superior sealability and impact-resistant properties in order to realize a fluid bearing used in a spindle motor developed for meeting the requirements of a high revolution and reduced thickness of a magnetic disc device.
SOLUTION: This spindle motor comprises a hub, on which a magnetic disc is mounted, a rotary shaft mated with the hub, a bearing unit rotatably supporting the rotary shaft, and a rotary magnetic field generating element driving the hub. A groove for preventing the rotary shaft from falling out is formed in the neighborhood of the end of the rotary shaft. One end of the bearing unit is opened, and the other end of the bearing unit is closed. A 1st sintered bearing with a cover, a 2nd sintered bearing with a stopper ring preventing the rotary shaft from falling out and a thrust bearing, and an annular permanent magnet provided between the 1st sintered bearing and the 2nd sintered bearing are arranged in the bearing unit from its open end side. The cover, the 1st sintered bearing, the 2nd sintered bearing, and the permanent magnet are impregnated with resin, to be bonded to each other.